

## PROGRAM FOR NATURAL RESOURCE MANAGEMENT IN UPPER WATERSHEDS

(GU-0133)

### EXECUTIVE SUMMARY

<b>Borrower:</b>	Republic of Guatemala	
<b>Executing agency:</b>	Ministry of Agriculture and Nutrition (MAGA)	
<b>Amount and source:</b>	IDB (CO):	US\$ 40 million
	Local:	<u>US\$ 4.45 million</u>
	Total:	US\$44.45 million
<b>Terms and conditions:</b>	Amortization period:	20 years
	Grace period:	5 years
	Disbursement period:	5 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	0.75% on undisbursed amounts
	Currency:	U.S. dollars from the Ordinary Capital under the Single Currency Facility
<b>Objectives:</b>	<p>The objective of the program is to improve natural resource management in upper watersheds by means of a strategy to support adjustment and/or conversion of production by small producers in rural areas. This objective will be achieved by strengthening natural resource management at the local level and promoting the development of productive activities that are environmentally and financially sustainable. This approach will help improve living conditions for the rural population, reconciling local aspirations for economic and social development with the need to preserve forest soil and water resources.</p>	
<b>Description:</b>	<p>The program will address the interconnected issues of environmental degradation and the high poverty rate through activities and investments designed to promote sustainable growth and to increase the social capital of rural communities, mainly by improving mechanisms for planning and implementing natural resource management. The specific program activities will be to: (i) develop</p>	

and implement instruments at the central and local levels to efficiently transfer central government aid to local communities and to strengthen their organizational capacity to protect the natural resource base; (ii) provide financial assistance, with technical support and physical inputs, for initiatives to transform systems of production and natural resource management through productive projects and support for nonagricultural productive projects; and (iii) develop local capacity at the municipal level for risk management, reduction of vulnerability to the threat of natural phenomena, and valuation of environmental services.

**Component 1: strengthening local capacity for natural resource management (US\$3.3 million)**

- (i) **Module 1:** Under this subcomponent, the institutional structure of the Ministry of Agriculture (MAGA) will be strengthened at the departmental office level.
- (ii) **Module 2:** This subcomponent will support participatory planning for natural resource management in rural communities through training events and mechanisms for coordination and consultation for productive investments and the preparation of natural resource management plans at the municipal and microwatershed levels.
- (iii) **Module 3:** Under this subcomponent, institutions providing technical assistance services will be strengthened through training, accreditation, and support for development of the market for technical assistance for agriculture and forestry. The technical assistance services for productive projects will be hired by the beneficiary institutions, which will select them from the rosters of accredited service providers to be updated by MAGA.

**Component 2: productive investments for natural resource management (US\$27 million)**

This component will support projects to transform land use patterns, converting unsustainable systems that degrade the natural resource base into environmentally sustainable productive systems, such as diversification into nonagricultural production.

Productive alternatives have been developed and reviewed according to technical criteria for environmental and financial sustainability. To be eligible, investments must be technical feasible under prevailing agricultural and environmental conditions in upper watersheds, must be environmentally and financial feasible, and must be

environmentally better than the systems they would replace. In addition, the alternatives must include a technology package that has been successfully tested in the field by small producers and must have a growing market and identified marketing channels.

To be eligible to participate in the program and receive benefits under it, participants must be small and medium-sized producers and must be organized in groups of producers involved in the same productive activity, such as traditional indigenous organizations or cooperatives, that carry out their economic activities in the municipalities located in the program area of influence. The assistance provided under the program will cover startup of productive conversion, so that after delivery of the technical assistance and physical inputs, the producers will have the management capacity to continue production and investments in the new systems that will increase their income.

The financial support provided through the technical assistance and physical inputs will be granted on a nonreimbursable basis through demand-driven selection procedures implemented by means of outreach activities and participatory local organization. However, the beneficiaries will be required under contract to generate savings, to be administered with the support of the community-based organizations, in the amount of the equivalent of the cost of the physical inputs received. This arrangement will promote savings on the part of the beneficiary producers. The Investment Regulations for component 2, productive investment financing, include the methodologies and guidelines for project preparation, selection, delivery of the technical assistance services, delivery and devolution of transfers, supervision, and evaluation.

### **Component 3: risk management, reduction of vulnerability, and environmental services (US\$4.5 million)**

**Module 1:** Under this subcomponent, investments will be made to mitigate risks and protect specific vulnerable areas. The management activities will include strengthening community organization, training for risk management and environmental education, construction of minor infrastructure works for risk mitigation, such as repair of flood damage and other protection works.

**Module 2:** The purpose of this subcomponent is to value the environmental services provided by watersheds by reviewing the causal relationship between changes in patterns of land use and natural resource management and their impact on water resources. To this end, a plan will be implemented for calibration, a predictive mathematical model and for measurement and assessment of physical parameters, to assess the impact of management activities in upper

watersheds on the quality and quantity of water resources in lower watersheds. The findings will help value environmental services in terms of their economic impact, which may lead to the development of instruments for payment of such services.

**The Bank's  
country and  
sector strategy:**

The Bank's sector strategy is to: (i) support the development of public policy to promote sector competitiveness; (ii) improve sustainable management of natural resources through support for policies to strengthen the regulatory framework for use and valuation of environmental services and greater participation and self-management on the part of rural communities; and (iii) support the development of rural productive infrastructure and basic social services, in order to reduce transaction costs for families, displaced persons, and rural microenterprises seeking access to markets.

The program objectives are fully consistent with this strategy and with the poverty reduction strategy the Government of Guatemala is preparing with assistance from the Bank and other international organizations. The program components and activities will help achieve these objectives.

**Environmental  
and social  
review:**

The proposed strategy for natural resource management is to change the way rural communities are organized to manage natural resources and how systems of production are designed so as to improve resource management and increase the return on productive activities and rural family income. The program will have a positive environmental impact in that it will promote technological change from unsustainable systems to sustainable ones. In addition, it will improve family income and will reduce pressure on the agricultural frontier. Its impact will be national in scope.

The review showed that the highlands located in the program area of influence have the agricultural, environmental, and climatic conditions to foster adjustment and/or conversion of production from the current systems of annual crops that degrade resources, to more environmentally and financially sustainable perennial systems. The program activities will focus on achieving conversion with those goals. The eligibility criteria stipulate that projects must meet basic environmental sustainability criteria. Section D of chapter IV describes the positive environmental impact identified and the measures to be taken to mitigate any potential adverse impact. The program design includes social equity-enhancing criteria in the geographical coverage of the program and emphasizes the participation and consultation of the rural communities targeted. It will also promote the participation of indigenous communities, which represent the majority of the target population.

**Benefits:** The net benefits of the program will be achieved in the short and medium terms through its local and regional impact. Some of these benefits cannot be directly quantified, but are important and substantial, especially those stemming from the increase in the social capital of the rural communities through the activities to promote the organization, local participation, and community-based management of natural resources.

As for the quantifiable financial benefits of the program, that is, the increase in income resulting from the productive investments, the sample of alternative projects analyzed showed a 34% rate of return for the projects to be carried out under component 2 of the program. This figure contrasts with that obtained in an analysis of conventional productive systems, some of which are neither environmentally nor financially sustainable.

**Risks:** The Government of Guatemala has assigned high priority to the proposed program as part of its poverty reduction strategy. Certain risks have been identified in connection with institutional issues in the executing agency of the program. The Ministry of Agriculture (MAGA) has recently experienced a degree of institutional instability, reflected in the three time turnover in its executive and managerial staff during the current administration. However, in the past 12 months, the MAGA has consolidated its technical cadre. In addition, special care has been taken to select a participatory institutional design with extensive interaction with the rural communities, producer associations, community-based organizations, and local governments. This approach will give the program a broad base of stakeholders and ensure support from the target population, a prerequisite for efficient program execution.

Execution of the Bank's portfolio of projects in Guatemala is generally rated satisfactory. However, there have been some delays in the startup of certain projects, associated with fulfillment of the conditions precedent to disbursement. In order to reduce the time required for fulfillment of the conditions precedent for the proposed program, the technical requirements for program execution were agreed upon with the executing agency during program preparation.

**Special contractual clauses:****As conditions precedent to the first disbursement:**

- a. A program execution system must be set up that includes: (i) establishment of the Program Board of Directors (CDP) (paragraph 3.7); (ii) establishment of the Program Coordination Unit (UCP), with the appointment of at least the program director (paragraph 3.8); and (iii) selection of the program administrative agency, all of which must be in the terms agreed upon with the Bank.
- b. The CDP must have implemented the Program Operations Manual, which will include the Investment Regulations for component 2, in the terms agreed upon with the Bank.

**Special contractual conditions:**

For the execution of module 2 under component 3, the MAGA must enter into an interagency agreement with the National Institute for Seismology, Volcanology, Meteorology, and Hydrology (INSIVUMEH) (paragraph 3.35).

**Poverty-targeting and social sector classification:**

This operation qualifies as a social equity-enhancing project, as described in the key objectives for Bank activity set forth in the Report on the Eighth General Increase in Resources (document AB-1704). Furthermore, this operation qualifies as a poverty-targeted investment (PTI), based on geographic targeting. The population in the program area, which totals approximately 2 million, is 71% indigenous (over 70%), some 1.4 million people, who live in rural areas, and over 80% of whom are poor (paragraph 1.32). The borrowing country will be using the 10 percentage points in additional financing (paragraph 2.25).

**Exceptions to Bank policy:**

None.

**Procurement:**

Bank policies and procedures will be followed for the awarding of construction contracts and the procurement of goods and services, as set forth in the loan contract. The program does not call for any complex or large-scale works. International competitive bidding will be required for goods and related services of US\$250,000 or more and for construction contracts in amounts of US\$1.5 million or more. International calls for proposals will be required for consulting services in amounts of US\$200,000 or more. Procurement below these thresholds will be governed by the procedures described in paragraph 3.44.